

DOCUMENT RESUME

ED 127 919

IR 003 881

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TITLE User Problems with Microforms.
INSTITUTION North Texas State Univ., Denton.
PUB DATE 11 Aug 76
NOTE 19p.

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.
DESCRIPTORS Attitudes; Educational Specifications; Higher Education; Librarians; *Microforms; Problems; *University Libraries; *Use Studies
IDENTIFIERS North Texas State University Library

ABSTRACT

To study user problems with the microform collection at the North Texas State University Library, oral interviews were conducted with a sample of 24 users. Results were evaluated and recommendations made in the areas of access, equipment, staff training, and attitude toward microforms. A selected bibliography is included. (EMH)

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ED127919

USER PROBLEMS WITH MICROFORMS

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August 11, 1976

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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Report prepared under the direction of Dr. Fred Pfister, School of Library and Information Science, North Texas State University with the support of Dr. David Webb and Joe H. Bailey, North Texas State University Library, Denton, Texas.

Abstract

Study of user problems with the microform collection at the North Texas State University Library. Oral interviews were conducted with a sample of 24 users. Results were evaluated and recommendations made in the areas of access, equipment, staff training, and attitude toward microforms. Includes selected bibliography.

USER PROBLEMS WITH MICROFORMS

This paper reports the results of a study of those problems which confront users of microforms. The study included a search of the relevant literature and the formulation of a research tool to identify user problems. This paper reports the utilization of the tool and reports the findings along with an appropriate bibliography and recommendations to help solve the problems.

STATEMENT OF NEED

Both the library literature and personal experience point to the conclusion that many library users of microforms are reluctant to use material in microform format. A common complaint is that microforms are less aesthetically pleasing than books and much less portable. Readers are usually available only at libraries and can cause physical fatigue and eye strain. The quality of microforms also varies considerably. Access to microforms is another major problem including both cataloging and the great variation in printed guides which accompany microform collections. These disadvantages and problems must be examined and weighed against the advantages of microforms. These advantages include the availability of rare, expensive, out-of-print, and hard-to-store materials in a format which is inexpensive, readily available, easy to store, and when available with a reader, highly portable.

METHODOLOGY

1. A literature search of relevant library and other educational literature was made and included such data bases as Library Literature, Library Science Abstracts, the ERIC system through Resources in Education, the Current Index to Journals in Education, and Education Index. In addition to a manual search the ERIC system was searched via an on-line computer terminal accessing the ERIC data base. An ERIC full text search was conducted using the following descriptors: Interviews, Questionnaires, Library Surveys, Attitudes, User, Users, Reading, Microforms, Microfilm, Microfiche, Microform Reader Printers, and Microform Readers. The computer search retrieved 351 citations and abstracts of which about twelve provided good background information and the others varying degrees of usefulness.

2. Extensive background reading was conducted in the field of user problems with microforms. Articles and reports by Christ, Cluff, Kottenstette, Miller, Salmon, and Schwarz were of particular value. (See Bibliography for full citation).

3. As a result of the background reading and studying the problem, the researcher elected to construct a questionnaire for the research tool. The questionnaire was administered as oral interviews to a sample of twenty-four users of the microform collection in the Special Collections Department of North Texas State University Library.

4. Questionnaire and Results

USER PROBLEMS WITH MICROFORMS

1. Classification of User

Faculty	1	(4.2%)
Staff	2	(8.3%)
Doctoral student	9	(37.5%)
Masters student	8	(33.3%)
Undergraduate student	2	(8.3%)
Community User	2	(8.3%)
Other		

2. What type of library materials on microform do you use?

Books	3	(6%)
Newspapers printed before 1900	9	(18%)
Newspapers printed after 1900	8	(16%)
Periodicals	7	(14%)
Theses and dissertations	2	(4%)
ERIC materials	8	(16%)
Presidential papers	5	(10%)
Other U. S. Government publications	6	(12%)
Music	2	(4%)

Presentation Problems

3. Could the microform be properly focused?

yes	16	(66.7%)
no	8	(33.3%)

4. Was the viewing screen of uniform brightness?

yes	14	(58.3%)
no	10	(41.7%)

5. Do you have problems reading a positive or negative image?

yes (negative image 6)	14	(58.3%)
no	10	(41.7%)

6. Were there scratches or marks on the microform?

yes	10	(41.7%)
no	14	(58.3%)

Task Accomplishment

7. Were you given adequate instruction in the use of the machine?

yes	19	(82.6%)
no	4	(17.4%)

8. Are you aware that portable microfiche readers may be checked out for home use?

yes	8	(33.3%)
no	16	(66.7%)

9. Did you have problems positioning the microform on the viewer?

yes	5	(20.8%)
no	19	(79.2%)

10. Did you have problems moving the microform from page to page?

yes	2	(8.3%)
no	22	(91.7%)

Environment and Systems Design

11. Were the staff helpful and efficient in retrieving the microforms?

yes	21	(87.5%)
no	1(lacked knowledge)	4.2%)
no opinion	2	(8.3%)

12. Were reading machines always available when you needed them?

yes	19	(86.4%)
no	3	(13.6%)

13. Was the lighting in the reading area acceptable?

yes	14	(58.3%)
no	10	(41.7%)
(room too dark 5)	(room too bright 2)	

14. Would you prefer the microform viewer in the middle of the desk?
(present location) to the right? to the left?

middle	9	(37.5%)
left	13	(54.1%)
right	2	(8.3%)

15. Was the desk comfortable for notetaking?

yes	12	(54.5%)
no	10	(45.5%)

16. Do the physical characteristics of the microform reader and the microform lead to physical fatigue?

yes	8	(34.8%)
no	15	(65.2%)

17. Eye fatigue?

yes	16	(69.6%)
no	7	(30.4%)

18. Do you wear corrective lens?

yes	18	(75%)
no	6	(25%)

19. If so, did this create a problem in using microforms?

yes	5	(27.8%)
no	13	(72.2%)

20. Did the microform reading machine work properly?

yes	19	(79.2%)
no	5	(20.8%)

21. Have you had photocopies of microforms made?

yes	19	(79.2%)
no	5	(20.8%)

22. If yes, was the quality of the copies adequate? good? poor?

adequate	6	(31.6%)
good	10	(52.6%)
poor	3	(15.8%)

23. Would you prefer to be able to make the copies yourself?

yes	10	(45.5%)
no	12	(54.5%)

24. Do you find it necessary to take more breaks when reading microforms as compared to books?

yes	17	(77.3%)
no	5	(22.7%)

25. Were you referred to the microform collection by the card catalog? Serials Record? Library staff? Professor?

card catalog	6	(21.4%)
serials record	6	(21.4%)
library staff	13	(46.4%)
professor	3	(10.7%)

26. Did you find the indexing adequate to find your information?

yes	15	(68.2%)
no	7	(31.8%)

General

27. Do you feel reluctant to use material in microform?

yes	3	(13.6%)
no	19	(86.4%)

28. Do you object to using machines as compared to books?

yes	4	(16.7%)
no	20	(83.3%)

29. What do you like or dislike about using microforms?

like	vertical screen readers	3
	accessible	3
	tilted screen	2
	easy to use	
	make available material not otherwise available	5
dislike	lighting	2
	lack of mobility	2
	eye strain	3
	prefer books	6
	quality of microcards and readers	

5. Discussion of the Results

Users of the microform materials were mostly graduate students followed by faculty and staff. Undergraduates and members of the Denton community made up about 16 per cent of the user sample. The microform clients utilized all the types of material available to a substantial degree, with most attention to newspapers and periodicals. Presidential papers, ERIC, and other U.S. government publications each received about the same amount of use.

The design and quality of the machines and microforms caused many of the problems encountered in actual presentation. A third of the users experienced difficulties in focusing the machine. Over 40 percent of those questioned found problems with screen brightness, in reading a negative or positive image and with scratched microforms. A common complaint regarding microopaques was that not only were they of poor quality, they were difficult to focus. Microopaque readers are also badly designed and uniformly produce a poorly lighted image. These comments are reflected by Roger Miller (page 91) and others. Miller further suggests and it seems to be the case at NTSU that the hardware is often a barrier between the student and the information. It is necessary for each patron to be given individual instruction in the use of the microform reader. Although 83 per cent of the users indicate that they had received this instruction, as Holmes reports "much of the dissatisfaction with microforms felt by librarians and users alike is caused by frustration and embarrassment resulting from the inabil-

ity to completely operate reading machines." Schwarz suggests the use of an equipment manual for each machine since these are typically not provided by the manufacturer, they usually must be prepared by the library.

Results of the questionnaire indicate satisfaction with the library staff and with the availability of machines. Indirect questions about staff efficiency indicated a need to provide more information. One user indicated that staff noise--both business and social--was distracting. The environment of the reading room must be subdued and quiet to provide the client with optimum reading conditions. Most of those interviewed found the lighting in the reading area acceptable. Of those who found the lighting unacceptable, one half found the area too dark and the others found the area too bright. Some way of individually controlling the light in the reading area would probably solve the problem. The type of material being used often determines the amount of light needed for easy reading.

The location of the microform reader on the desk apparently affected the comfort and ease of access of the user. Presently the readers are located in the center of the desk; however, over 54 per cent of those questioned preferred the viewer to be placed on the left side of the desk. Almost the same percentage of users found the desk and its L-shape comfortable for notetaking. Most of those who were uncomfortable indicated that they were left-handed thus the right-handed note-table was useless for them.

Fatigue is a common problem mentioned in the literature and by users and about one-third of the users reported physical fatigue from reading microforms. A far larger group of about 70 per cent reported problems with eye fatigue. It is interesting to note that about 75 per cent of the sample wear corrective lens but less than 30 per cent of those felt this created problems in reading microforms.

Machine malfunctions did not create significant problems. About 79 per cent found the machines to be working properly. An occasional burned out lamp or broken cable was encountered but quickly corrected.

Photocopies of microfilm and microfiche are made by the staff on a 3-M Model 400. Microopaque copies are made on a Denison reader/printer. 79 percent of those sampled had had photocopies made and about 54 per cent would prefer to have the staff make the copies for them. Opinions as to the quality of the copies varied considerably. Over one-half of the users felt the quality was good while 32 per cent felt the quality was adequate and 16 per cent felt the quality was poor. It is my opinion and that shared by the staff of the microform area that the copy quality is barely adequate when the machines are working properly. New model reader/printers which use the dry-silver or electrostatic processes seem to produce superior copies. It is expected that if the users were able to get copies of the improved quality that the results of this question at this time would be quite different.

Almost one-half of the users were referred to the microform collection by the library staff while 21 per cent each were referred by the card catalog or the serial record. Only 10 per cent were referred by the faculty. Related to access of the microform collection, about 68 per cent found the indexing adequate. As with the quality of photocopies, these responses must be tempered by the lack of knowledge of what they are missing. Responses in this area indicate a possible lack of knowledge by the faculty of the collection and the need to work more closely with the faculty to provide information about what is available. As is well documented by the literature, cataloging of microform collections is a major problem and this collection is not an exception. Periodicals are relatively accessible through the serial record. However, most collections of monographs are cataloged as serials and the contents noted on the main entry for the set. While this may be correct cataloging procedure, it effectively buries the collection and makes access by author, title, or subject very difficult. Users are almost forced to rely on being referred to a collection by library staff or faculty. It should be noted that the cataloging staff and other library personnell involved are working to try to correct the problem. Obviously it is extremely difficult and expensive to provide proper access to a large collection and yet if it is to be purchased, proper public access must be provided.

As might be expected, the users of the microform collection displayed minimal reluctance to use microform and relatively few objected to using microforms as compared to books. The question-

naire was given to users of the microform collection and probably non-users would have displayed an increased reluctance to use microforms.

Users of the microform collection found it necessary to take more breaks when reading microforms as compared to books. Other objections mentioned were lighting and eye strain. Lack of mobility was also mentioned. One cannot curl up with a microform reader in front of a fireplace. The quality of microcards and the readers to view them was also criticized. Also given a choice many people prefer books to microforms.

Advantages of microforms include their accessibility, ease of use, the availability of material not otherwise available. In addition microforms are available in a format which is inexpensive, readily available, easy to store, and when available with a reader, highly portable.

RECOMMENDATIONS

1. Access

Efforts should be intensified to provide better access to microform sets. Nationally this is being encouraged by Dale Cluff and the staff of the Marriott Library, University of Utah as evidenced by the July 1976 issue of Microform Review. The NTSU Library is urged to cooperate with national efforts as well as to try to improve inhouse access. A guide to the collections of microforms at NTSU has been in preparation for several years. This guide should be completed as rapidly as possible and be made

available to all interested students and faculty. The guide should be in plain English, not jargon, and should briefly describe the major microform sets in the collection, where they are, and how to use them.

2. Equipment

As a result of the responses to the questionnaire, the readers should be moved to the left position on the desk. Although the lighting is considered excellent by national standards, it would be helpful to consider the possibility of adding individually controlled supplemental lights for each reading desk. This year 4 additional top quality microfiche readers have been ordered and the continued upgrading and improving of the equipment should be continued. A modern, flexible, reader/printer should be ordered at the earliest possible date. Machines should be frequently cleaned and checked for proper operation.

3. Staff

The staff servicing the microform collection should be trained to be thoroughly familiar with the collection and how to access it. Through the use of the proposed guide and inservice training, library staff at other public service desks should be made aware of what types of material are in the collection and when to refer the user to the microform collection. The proper training of the library staff is of utmost importance due to the lack of access already mentioned.

4. Attitude

As I was completing this report, the July 1976 issue of Microform Review came across my desk and it contains some comments by Allen Veaner which are extremely pertinent to our consideration of problems with microforms. "Users and potential users are alleged to exhibit great resistance to microforms. Where does this resistance come from? No doubt some of it is real ... But could it be that a significant part of user resistance is our own fault? Is it because we tend to express user interaction with microforms negatively? If we keep telling people how hard they are to use, won't people naturally believe us? Have we identified outstanding examples of micropublishing projects, examined the features which made them successful and paraded them before the public? ... But one way to assure an increase in successful projects is to be certain that the really good ones get the praise they deserve."

SELECTED BIBLIOGRAPHY

- Asleson, Robert F. "Microforms: Where Do They Fit?" Library Resources and Technical Services, XV (Winter 1971), 57-62.
- Baldwin, Thomas S. and Larry J. Bailey. "Readability of Technical Training Materials Presented on Microfiche Versus Offset Copy." Journal of Applied Psychology, LV (Feb 1971), 37-41.
- Campbell, B. W. "A Successful Microfiche Program." Special Libraries, LXII (Mar 1971), 136-42.
- Christ, C. W., Jr. "Microfiche: A Study of User Attitudes and Reading Habits." Journal of the American Society for Information Science, XXIII (Jan-Feb 1972), 30-5.
- Cluff, E. Dale. "Determining National Interest and/or Activity Relating to Bibliographic Access of Microforms." Microforms Review, IV (Oct 1975), 266-9.
- Letter in Microform Review, V (July 1976), 182-3.
- Coffman, R. L. An Inquiry into the Effect of Microfilm on the Graduate Student User's Reading Rate and Comprehension. Springfield, Va.: NTIS, 1972. NTIS no. AD-760-916, ERIC Document no. ED 082 128.
- Conference on Microfilm Utilization: the Academic Library Environment, Denver, Colorado, 1970. Microform Utilization. Denver: University of Colorado, 1971.
- DeVilliers, Ann M. and Barbara Frick Schloman. "Experiences with Scientific Journals on Microfilm in an Academic Reading Room." Special Libraries, LXIV (Dec 1973), 555-60.
- Diaz, Albert James, ed. Microforms in Libraries. Weston, Conn.: Microform Review, 1975.
- Fair, Judy. "The Microform Reading Room: Part IV." Microform Review, II (July 1973), 168-71.
- Fleischer, Eugene B. Bibliographic Citations for Nonprint Materials; a Manual for Writers of Term Papers and Theses. (ERIC document no. ED 114 121). Reviewed in Microform Review, V (July 1976), 248-9.
- Gaddy, Dale. A Microform Handbook. Silver Spring, Md.: National Microfilm Assn., 1974.

- Heim, K. M. "Role of Microforms in the Small College Library." Microform Review, III (Oct 1974), 354-9.
- Holmes, Donald. Determination of the Environmental Conditions in a Library for the Effective Utilization of Microforms, Interim Report. Washington, D. C.: Association of Research Libraries, 1970. ERIC document no. ED 046 403.
- Jestes, Edward C. "Little Fische Eat Big Librarians." Wilson Library Bulletin, XLXV (Feb 1970), 650-2.
- Kottenstette, James P. Development of Microform Training Materials. Denver: University of Denver, 1970.
- . An Investigation of the Characteristics of Ultra-fiche and its Application to Colleges and Universities. Denver: University of Denver, 1969.
- and K. Anne Dailey. An Investigation of the Environment for Education Microform Utilization. Denver: University of Denver, 1971. ERIC Document no. ED 050 603.
- Leisinger, Albert H., Jr. User Evaluations of Microfilm Readers for Archival and Manuscript Materials. Washington, D. C.: National Archives and Record Service, 1973. ERIC Document no. ED 077 542.
- Lewis, Ralph W. "User's Reaction to Microfiche, A Preliminary Study." College and Research Libraries, XXXI (July 1970), 260-8.
- Meynet, Chris and Evelyn Wood. Microfilm Reading Rate and Comprehension Study. Westport, Conn.: Evelyn Wood Reading Dynamics, 1967. NTIS no. AD 770 536, ERIC Document no. ED 087 994.
- Miller, Roger C. "Why Don't They Make Microform Machines for Libraries." Microform Review, II (Apr 1973), 91-2.
- Mitchell, George. Microforms: Legerdemain in the Library. Revised version of paper presented at the Southwestern Library Association Annual Meeting, Galveston, Texas, October 15, 1974. ERIC Document No. ED 105 884.
- Nanney, Thomas. Using Microfilm Effectively. New York: Geyer-McAllister, 1968.

- Prevel, James J. A Technical User and Cost Comparison Study of Microfiche Duplicate Film Material. Washington, D. C.: Educational Information Systems, 1973. ERIC Document no. ED 078 697.
- Rebuldela, H. K. "Ultrafiche Libraries: a User Survey of the Library of American Civilization." Microform Review, III (July 1974), 178-88.
- Rochlin, Phillip. "Micro Media in the Library: A Once Over Lightly." Journal of Micrographics, VI (Jan 1973), 99-103.
- Salmon, Stephen R. "User Resistance to Microforms in the Research Library." Microform Review, III (July 1974), 194-99.
- Schwarz, Philip. "Learning to Use Microform Equipment: A Self-Instructional Approach." Microform Review, IV (Oct 1975), 262-5.
- Spaulding, Carl M. and Judy H. Fair. "Micrographics 1974." Library Resources and Technical Services, XIX (Summer 1975), 206-25.
- Spreitzer, Francis F. "Developments in Copying, Micrographics, and Graphic Communications, 1972." Library Resources and Technical Services, XVII (Spring 1973), 144-67. (Mr. Spreitzer met with the author at the First Annual Library Microform Conference in New York City, 1975, and was very helpful in answering questions and providing background information).
- Starr, Paul. "Transforming the Libraries: From Paper to Microfiche." Change, VI (Nov 1974), 34-40.
- Stevens, Norman D. Letter in Response to Stephen Salmon article "User Resistance to Microforms in the Research Library." Microform Review, IV (Apr 1975), 100.
- Veane, Allen B. The Evaluation of Micropublications. Chicago: American Library Association, Library Technology Program, 1971.
- "Resistance to Microforms." Microform Review, V (July 1976), 181.
- Willems, John. "Microfiche as a Means of Providing Students with Literature.: Microform Review, III (Jan 1974), 26-9.
- Wooster, Harold. Microfiche 1969--A User Study. Springfield, Va.: Clearinghouse for Federal Scientific and Technical Information, 1969.